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ABSTRACT

This study updated statistics about public library outlet and system Internet connectivity and network services using the 1997 public library dataset produced by the National Center for Education Statistics through the Federal-State Cooperative System. Using geographic information system-based techniques, a research team at the Florida State University geocoded 16.004 public library outlets in terms of their poverty (defined as less than 20%, 20%-40%, and greater than 40%) and metropolitan status (urban, suburban, and rural). From the 16,004 geocoded outlets, the consultants drew a sample of 1,500 outlets in proportion to their percentage in poverty and metropolitan status categories. Data collection occurred via a Web-based survey. Sixteen tables present survey findings in the following areas: (1) connectivity and public access; (2) Internet services provision and implementation; (3) public library system funding; (4) digital reference services; and (5) training services. The report concludes with a summary of findings and recommendations. A copy of the online survey form is appended. (MES)

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Information Use Management and Policy Institute

Public Libraries and the Internet 2002: Internet Connectivity and Networked Services

By:

John Carlo Bertot <jcbertot@lis.fsu.edu>
Associate Professor and Associate Director
Information Use Management and Policy Institute
School of Information Studies
Florida State University
Louis Shores Building, Room 244
Tallahassee, FL 32306-2100
(850) 644-8118 phone
(850) 644-4522 fax

Charles R. McClure <cmcclure@lis.fsu.edu>
Francis Eppes Professor and Director
Information Use Management and Policy Institute
School of Information Studies
Florida State University

With the Assistance of:

Kim M. Thompson
Research Fellow
Information Use Management and Policy Institute
School of Information Studies
Florida State University

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C.F. McClure

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To all these individuals and groups, we say thank you. The help with which you provided us made this the 6th *Public Library Internet* study to achieve a better than 70% response rate!

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INTRODUCTION

In 2002, the Institute of Museum and Library Services (IMLS) commissioned a study to determine the current state of U.S. public library Internet connectivity. The study, conducted through a national survey, was part of a larger study funded by IMLS that focused on public library roles in the digital divide (McClure, Ryan & Bertot, 2002). Since 1994, the authors have conducted a number of studies that track longitudinally a number of key aspects concerning public library Internet involvement, including connectivity, bandwidth, public access services, and other Internet-based library services and resources. Over the years, these studies have enjoyed multiple sponsors such as the National Commission on Libraries and Information Science (NCLIS) and the American Library Association (ALA).

METHODOLOGY

The 2002 study updated statistics about public library outlet and system Internet connectivity and network services using the 1997 public library dataset produced by the National Center for Education Statistics (NCES)[1] through the Federal-State Cooperative System (FSCS).[2] Using geographic information system-based techniques, a research team at the Florida State University geocoded 16,004 public library outlets in terms of their poverty (defined as less than 20%, 20%-40%, and greater than 40%) and metropolitan status (urban, suburban, and rural) using the same techniques as for the *Public Library Internet* 1998 and 2000 studies.[3] From the 16,004 geocoded outlets,[4] the consultants drew a sample of 1,500 outlets in proportion to their percentage in poverty and metropolitan status categories. This sample was the same as that of 1998 *Public Library Internet* study.

The study team developed and pre-tested a number of survey questions for inclusion on the 2002 survey form. These pre-test methods included:

- Distributing and discussing the draft survey with state data coordinators using the state data coordinator listserv maintained by NCLIS;
- Distributing copies of the draft survey questions to selected individuals involved with public library data collection efforts (e.g., Public Library Data Service); and
- Distributing draft copies of the survey to library school faculty and public librarians.

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[1] National Center for Education Statistics. Available at: http://nces.ed.gov/

[2] Background of the Federal-State Cooperative System (FSCS) for Public Library Data. Available at: http://www.state.me.us/msl/fscsdef.pdf

[3] For a detailed discussion of the geocoding process, see Appendix C of U.S. National Commission on Libraries and Information Science. (1998). *Moving toward more effective public Internet access: The 1998 national survey of public library outlet Internet connectivity.* Washington, D.C.: National Commission on Libraries and Information Science.

[4] According to the National Center for Education Statistics, there were 16,925 public libraries in 1997. Of those, many have P.O. boxes for mailing addresses and several are bookmobiles. It is not possible to geocode bookmobiles nor some service outlets with P.O. boxes as these are not fixed locations. With the techniques available in April 2000, it was possible to geocode 16,004 of the 16,925 outlets.

Based on the comments provided by the various survey reviewers, the consultants developed a final version of the survey form.

In a departure from previous Public Library Internet studies, the study team did not produce a mail-based survey form. Rather, all data collection for the 2002 study occurred via a web-based survey form. Each library was assigned a unique ID number (the FSCS library ID number from the FSCS/NCES dataset) for access to the appropriate survey form or set of forms for the library to complete. Those completing the form, if applicable, first completed the questions regarding the surveyed branches (outlets) and then completed the questions regarding the entire library system (see Appendix A for a screen copy version of the survey form).

The study team mailed a letter in June 2002 that identified the intent of the study, the branches (outlets) surveyed (if applicable), and survey completion instructions to the library director of the library systems selected to participate in the study. At the same time, the study team distributed the sample list to the state data coordinators to apprise them of the library outlets sampled in their states. The study team attempted to correct letters returned due to incorrect addresses. When it was not possible to correct the address, or the library outlet closed, the study team selected a replacement outlet in the same poverty and metropolitan status category. Survey collection occurred through August 2002, with a final response rate of 73.3%.

The state data coordinators provided tremendous support to the data collection effort, often calling and e-mailing non-responding libraries within their states to urge participation. To also boost the survey response rate, members of the study team called non-responding libraries and conducted phone interviews to elicit the survey information for the libraries.

READING THE TABLES

National estimates of public library connectivity were weighted based on metropolitan status and poverty classification. Thus, the analysis uses the actual responses from the 1,100 completed surveys from library outlets to estimate to all geocoded outlets.

For example, Winter Harbor Public Library in Winter Harbor, Maine, is coded as a rural library outlet with less than 20% poverty. Winter Harbor Public Library's responses (and all others designated rural with less than 20% poverty) are weighted by 14.023 to generate an estimate for all rural library outlets with less than 20% poverty.[5]

Tables 3 through 16 present these weighted study findings. Readers should note that this weighting necessitates some amount of rounding of the numbers generated in which case the total may not add up to 100%.

[5] By multiplying the weight of 14.023 by the total number of respondents in the rural with less than 20% poverty outlets (14.023 x 485 – see Table 2), one should get the total number of outlets for that cell in Table 1 (6,801).

Table 1. Public Library Outlets by Metropolitan Status and Poverty.				
	Poverty			
	Less than 20%	20%-40%	More than 40%	Overall
Metropolitan Status				
Urban	10.1% (n=1,614)	5.7% (n=905)	1.4% (n=223)	17.1% (n=2,742)
Suburban	27.7% (n=4,432)	2.0% (n=316)	0.1% (n=16)	29.8% (n=4,764)
Rural	42.5% (n=6,801)	10.1% (n=1,611)	0.5% (n=86)	53.1% (n=8,498)
Overall	80.3% (n=12,847)	17.7% (n=2,832)	2.0% (n=325)	100.0% (n=16,004)
Based on geocoding of 16,004 outlets.				

Table 2. Response Rate of 2000 Outlet Study by Metropolitan Status and Poverty.				
	Poverty			
	Less than 20%	20%-40%	More than 40%	Overall
Metropolitan Status				
Urban	10.6% (n=117)	5.2% (n=57)	2.1% (n=23)	17.9% (n=197)
Suburban	25.4% (n=279)	1.9% (n=21)	0.4% (n=4)	27.6% (n=304)
Rural	44.1% (n=485)	9.9% (n=109)	0.5% (n=5)	54.5% (n=599)
Overall	80.1% (n=881)	17.0% (n=187)	2.9% (n=32)	100.0% (n=1,100)
Based on 1,100 responses out of 1,500 for a total response rate of 73.3%.				

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

KEY SURVEY FINDINGS

The tables and narratives below describe public library outlet Internet connectivity as of September 2002 and, where possible, identify significant changes from the *Public Libraries and the Internet 2000* study findings.

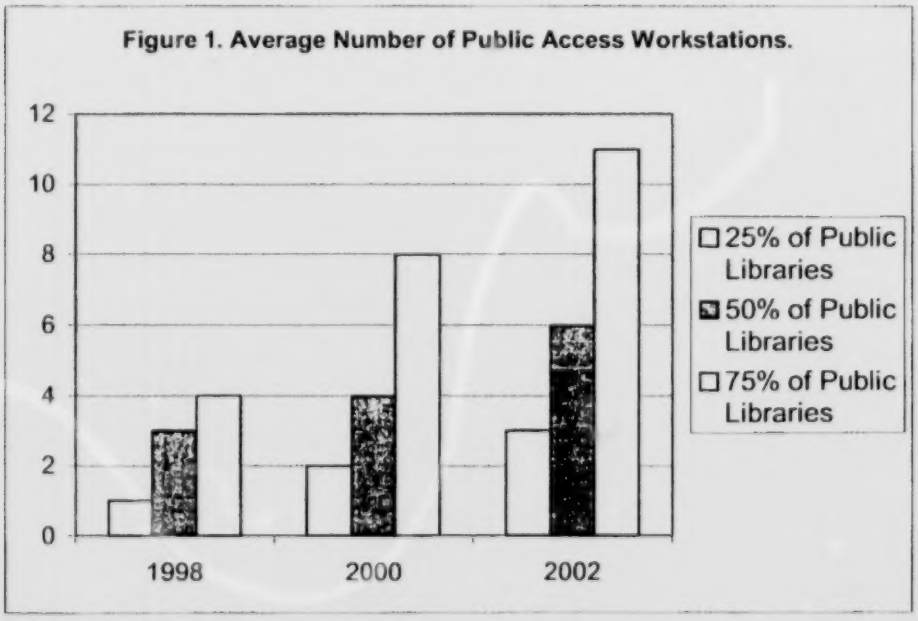
Connectivity and Public Access

Almost all public library outlets (98.7%) have an Internet connection, an increase from 95.7% in 2000 (see Table 3). Notably, urban libraries have increased from 98.3% in 2000 to 100% in 2002, and rural libraries have increased from 93.3% in 2000 to 97.8% in 2002. Public library outlets with more than 40% poverty have also reached 100% connectivity in 2002.

Most library outlets (95.3%) also provide public access to the Internet (see Table 4). Of particular interest is that 100% of urban library outlets surveyed provide public access to the Internet, up from 97.7% in 2000, and 100% of outlets with more than 40% poverty do as well, an increase from 93.5% in 2000.

Outlets with public access Internet services have an average of 10.8 workstations per outlet, an increase from 8.3 in 2000 (see Table 5 and Figure 1). Indeed, public library outlets have doubled or almost tripled the number of public access workstations for patron use in the past four years (see Table 6). In 2002, one quarter of public library outlets have three (3) or fewer workstations as compared to two (2) in 2000 and one (1) in 1998. Half of library outlets have six (6) or fewer workstations, as compared to four (4) in 2000 and three (3) in 1998, and three-quarters of public library outlets now have eleven (11) or fewer workstations as compared to eight (8) or fewer in 2000 and four (4) or fewer in 1998.

Figure 1. Average Number of Public Access Workstations.



Connection speeds for public access Internet services also increased (see Table 7). Indeed, 49.1% of outlets have T1 (1.5mbps) or faster speed of connectivity for public access services, as compared to 36.2% in 2000. With regard to rural outlets, 49.7% have greater than 56kbps (direct connect) service as their maximum speed of connectivity for public access services as compared to 35.4% in 2000 and 22.2% in 1998. Also, 33.2% of rural library outlets and 47.2% of libraries with more than 40% poverty are able to provide T1 (1.5mbps) service or greater.

Table 3. Public Library Outlets Connected to the Internet by Metropolitan Status and Poverty.

	Poverty			
	Less than 20%	**20%-40%**	**More than 40%**	**Overall**
Metropolitan Status				
Urban	100.0% +/- 0.0% (n=1,614)	100.0% +/- 0.0% (n=905)	100.0% +/- 0.0% (n=223)	100.0% +/- 0.0% (n=2,742)
Suburban	99.6% +/- 0.6% (n=4,416)	100.0% +/- 0.0% (n=316)	100.0% +/- 0.0% (n=16)	99.7% +/- 0.5% (n=4,748)
Rural	98.4% +/- 1.3% (n=6,689)	95.4% +/- 2.1% (n=1,537)	100.0% +/- 0.0% (n=86)	97.8% +/- 1.5% (n=8,312)
Overall	99.0% +/- 1.0% (n=12,719)	97.4% +/- 1.6% (n=2,758)	100.0% +/- 0.0% (n=325)	98.7% +/- 1.1% (n=15,802)

Table 4. Connected Public Library Outlets that Provide Public Access to the Internet by Metropolitan Status and Poverty.

	Poverty			
	Less than 20%	**20%-40%**	**More than 40%**	**Overall**
Metropolitan Status				
Urban	100.0% +/- 0.0% (n=1,614)	100.0% +/- 0.0% (n=905)	100.0% +/- 0.0% (n=223)	100.0% +/- 0.0% (n=2,742)
Suburban	95.0% +/- 2.2% (n=4,194)	100.0% +/- 0.0% (n=316)	100.0% +/- 0.0% (n=16)	95.3% +/- 2.1% (n=4,526)
Rural	92.7% +/- 2.6% (n=6,198)	98.1% +/- 1.4% (n=1,508)	100.0% +/- 0.0% (n=86)	93.7% +/- 2.4% (n=7,792)
Overall	94.4% +/- 2.3% (n=12,006)	98.9% +/- 1.0% (n=2,729)	100.0% +/- 0.0% (n=325)	95.3% +/- 2.1% (n=15,059)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Table 5. Average Number of Public Library Outlet Graphical Public Access Internet Terminals by Metropolitan Status and Poverty.				
	Poverty			
	Less than 20%	20%-40%	More than 40%	Overall
Metropolitan Status				
Urban	16.6 range: 1-171	29.1 range: 1-680	12.9 range: 2-36	20.6 range: 1-680
Suburban	11.9 range: 1-139	9.3 range: 1-40	3.5 range: 2-5	11.7 range: 1-139
Rural	6.5 range: 1-81	7.5 range: 1-45	4.0 range: 1-5	6.7 range: 1-81
Overall	9.8 range: 1-171	15.1 range: 1-680	10.6 range 1-36	**10.8** range: 1-680

Table 6. Frequency Analysis of Public Library Outlet Number of Graphical Public Access Workstations.	
Quartile	**Number of Graphical Workstations Per Outlet**
1 (25%)	3
2 (50%)	6
3 (75%)	11

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Table 7. Public Library Outlet Maximum Speed of Public Access Internet Services by Metropolitan Status and Poverty.

	Metropolitan Status			Poverty Level			
	Urban	Suburban	Rural	Less than 20%	20%-40%	More than 40%	Overall
Maximum Speed							
Less than 56kbps	-	-	3.3% +/- 1.7% (n=257)	1.4% +/- 1.1% (n=168)	3.3% +/- 1.8% (n=89)	-	1.7% +/- 1.3% (n=257)
56kbps dial-up	-	2.8% +/- 1.6% (n=126)	11.0% +/- 3.0% (n=858)	7.7% +/- 2.6% (n=925)	2.2% +/- 1.5% (n=59)	-	6.5% +/- 2.4% (n=984)
56kbps direct connect	6.6% +/- 2.5% (n=181)	10.6% +/- 3.0% (n=478)	20.1% +/- 3.9% (n=1,567)	14.3% +/- 3.4% (n=1,717)	15.8% +/- 3.6% (n=432)	23.7% +/- 4.3% (n=77)	14.8% +/- 3.5% (n=2,226)
64kbps – 128kbps	4.5% +/- 2.1% (n=124)	8.1% +/- 2.7% (n=365)	8.2% +/- 2.7% (n=638)	6.9% +/- 2.5% (n=832)	10.0% +/- 2.9% (n=272)	7.2% +/- 2.6% (n=23)	7.5% +/-2.6% (n=1,127)
128kbps – 1.5mbps	7.4% +/- 2.6% (n=204)	11.6% +/- 3.1% (n=523)	8.3% +/- 2.7% (n=650)	9.9% +/- 2.9% (n=1,193)	6.7% +/- 2.5% (n=183)	-	9.1% +/- 2.8% (n=1,377)
T1 (1. 5mbps)	43.1% +/- 4.9% (n=1,182)	38.3% +/- 4.8% (n=1,734)	27.9% +/- 4.4% (n=2,170)	33.2% +/- 4.6% (n=3,981)	36.3% +/- 4.8% (n=991)	35.3% +/- 4.8% (n=115)	33.8% +/- 4.7% (n=5,087)
Greater than 1.5mbps	34.1% +/- 4.7% (n=936)	21.0% 4.0% (n=951)	5.3% +/- 2.2% (n=413)	14.8% +/- 3.5% (n=1,781)	17.6% +/- 3.8% (n=481)	11.9% +/- 3.3% (n=39)	15.3% +/- 3.5% (n=2,301)
Don't Know	3.7% +/- 1.9% (n=102)	5.9% 3.0% (n=268)	15.6% +/- 4.1% (n=1,212)	10.5% +/- 3.6% (n=1,259)	9.2% +/- 3.0% (n=252)	21.8% +/- 4.1% (n=71)	10.5% +/- 3.5% (n=1,582)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Internet Services Provision and Implementation

The survey form queried public library outlets as to their provision and implementation of public access online databases, blocking of Internet services (i.e. Chat), and filtering or blocking of Internet content (i.e. objectionable sites or images). Responses to the surveys showed that 90.6% of public library outlets offering database subscription services on some or all of their public access workstations (see Table 8). This is an increase from 81.1% in 2000. Remote database access has also increased, from 36.1% in 2000 to 44.3% in 2002.

The 2000 *Public Libraries and the Internet* survey queried public library outlets about the blocking of Internet services. The 2002 iteration of the study divided this question to address both the blocking of Internet *services* and, a related but separate issue, the blocking of Internet *content*. Responses to the 2000 survey indicated that 9.6% of public library outlets blocked Internet services on all public access workstations, 15% blocked services on some workstations, and 75.5% of public library outlets did not block Internet services at all. The 2002 survey responses show that 16.4% block Internet services on all public access workstations, 9.6% block services on some workstations, and 73.9% of public library outlets do not block Internet services on their public access workstations (see Table 9).

Table 8. Public Library Outlet Public Access Database Subscription Services by Metropolitan Status and Poverty.

	Metropolitan Status			Poverty Level			
	Urban	**Suburban**	**Rural**	**Less than 20%**	**20%-40%**	**More than 40%**	**Overall**
Subscription Database Services							
On all workstations	75.5% +/- 4.3% (n=2,071)	61.7% +/- 4.8% (n=2,792)	63.3% +/- 4.9% (n=4,962)	64.5% +/- 4.8% (n=7,741)	69.0% +/- 4.7% (n=1,881)	53.2% +/- 5.0% (n=173)	65.0% +/- 4.8% (n=9,795)
On some workstations	21.8% +/- 4.2% (n=598)	31.0% +/- 4.6% (n=1,402)	23.8% +/- 4.5% (n=1,851)	25.5% +/- 4.4% (n=3,066)	24.4% +/- 4.4% (n=667)	36.2% +/- 4.8% (n=118)	25.6% +/- 4.5% (n=3,851)
On no workstations	2.7% +/- 1.6% (n=73)	7.3% +/- 3.1% (n=332)	12.9% +/- 3.4% (n=1,008)	10.0% +/- 3.0% (n=1,199)	6.6% +/- 2.5% (n=180)	10.6% +/- 3.1% (n=34)	9.4% +/- 3.9% (n=1,413)
Subscription services offered remotely to off-site users	61.9% +/- 4.9% (n=1,698)	41.2% +/- 5.0% (n=1,866)	40.0% +/- 4.9% (n=3,114)	44.7% +/- 4.9% (n=5,364)	43.1% +/- 4.9% (n=1,176)	42.5% +/- 4.9% (n=138)	44.3% +/-4.9% (n=6,678)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Table 9. Public Library Outlet Public Access Internet Blocking of Internet Services (i.e., Chat) by Metropolitan Status and Poverty.

	Metropolitan Status			Poverty Level			
	Urban	**Suburban**	**Rural**	**Less than 20%**	**20%-40%**	**More than 40%**	**Overall**
Blocking of Internet Services							
On all workstations	29.8% +/- 4.6% (n=817)	15.0% +/- 3.5% (n=679)	12.6% +/- 3.2% (n=981)	15.0% +/- 3.5% (n=1,802)	23.0% +/- 4.2% (n=627)	14.9% +/- 3.3% (n=48)	16.4% +/- 3.6% (n=2,477)
On some workstations	9.7% +/- 2.9% (n=266)	13.0% +/- 3.3% (n=587)	7.7% +/- 2.6% (n=600)	9.4% +/- 2.9% (n=1,131)	9.4% +/- 2.9% (n=257)	20.2% +/- 4.0% (n=66)	9.6% +/- 2.9% (n=1,453)
On no workstations	60.5% +/- 4.9% (n=1,659)	72.0% +/- 4.4% (n=3,260)	79.7% +/- 3.9% (n=6,210)	75.6% +/- 4.2% (n=9,074)	67.6% +/- 4.7% (n=1,844)	64.9% +/- 4.7% (n=211)	73.9% +/- 4.3% (n=11,129)

Table 10. Public Library Outlet Public Access Internet Blocking of Internet Content (i.e., objectionable material) by Metropolitan Status and Poverty.

	Metropolitan Status			Poverty Level			
	Urban	**Suburban**	**Rural**	**Less than 20%**	**20%-40%**	**More than 40%**	**Overall**
Blocking of Internet Content							
On all workstations	38.9% +/- 4.8% (n=1,066)	19.5% +/- 3.8% (n=884)	22.1% +/- 4.0% (n=1,724)	21.6% +/- 4.0% (n=2,592)	36.9% +/- 4.8% (n=1,007)	23.2% +/- 4.2% (n=75)	24.4% +/- 4.2% (n=3,674)
On some workstations	18.1% +/- 3.8% (n=496)	23.8% +/- 4.2% (n=1,077)	13.7% +/- 3.3% (n=1,066)	18.5% +/- 3.7% (n=2,217)	12.7% +/- 3.3% (n=346)	23.2% +/- 4.2% (n=75)	17.5% +/- 3.7% (n=2,639)
On no workstations	43.0% +/- 4.9% (n=1,180)	56.7% +/- 4.9% (n=2,565)	64.2% +/- 4.7% (n=5,002)	59.9% +/- 4.8% (n=7,197)	50.4% +/- 5.0% (n=1,375)	53.6% +/- 4.9% (n=174)	58.1% +/- 4.9% (n=8,747)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

With regard to filtering of Internet content, 24.4% of library outlets responded that they block objectionable material on all workstations, 17.5% of outlets block on some public access workstations, and 58.1% of public library outlets do not block Internet content on any of their public access workstations (see Table 10).

The remainder of the survey focused on system wide questions. To remain consistent in the overall presentation of the data, responses from the systems were projected nationally to public library outlets.

Public Library System Funding

Compared with 2000 data, the trend in funding for Internet-related technology and infrastructure appears to be moving away from local government funding (down 13.5% since 2000), shifting toward more state library funding (up 16.2%) and federal government funding (up 4.8%) (see Table 11).

E-rate discount funding in public libraries has decreased by 5.5% since 2000, while library foundation funding has increased by 10.6%. Gates library program funding has also slightly increased (up 2.6%), and gifts, contributions, donations, local fundraisers and other local income sources in sum increased by 12.3%.

The study found that 29.9% of the public libraries surveyed would continue to apply for E-rate discounts if the Children's Internet Protection Act (CIPA) is upheld, and 18.9% replied that they would not (see Table 12). More than half (51.3%) were unsure of how CIPA would affect their intention to apply for E-rate discounts.

Table 11. Public Library *System* Funding for Internet-Related Technology and Infrastructure.	
Funding Source	**Percentage of Funding Source**
Operating funds from local government/tax districts	74.2% +/- 4.4% (n=11,181)
Operating funds from state library	39.8% +/- 4.9% (n=5,992)
State grants	28.9% +/- 4.5% (n=4,352)
Federal government funds (LSTA, TIAPP)	23.1% +/-4.2% (n=3,483)
Education Rate (E-rate) discount	43.4% +/- 4.9% (n=6,536)
Library foundation funds	18.9% +/- 3.9% (n=2,845)
Gates library program	34.0% +/- 4.7% (n=5,122)
Gifts, contributions, donations	30.5% +/- 4.6% (n=4,593)
Local fund raisers	13.7% +/- 3.4% (n=2,057)
Other income sources	9.9% +/- 2.9% (n=1,483)
Percentages will not total to 100.0% as respondents could select multiple funding options.	

Table 12. Public Library Intention to Apply for E-Rate Discounts if CIPA is Upheld.	
Continued Application for E-rate Discounts	**Percentage of E-rate Discount Applications**
Yes would continue to apply	29.9% +/- 4.6% (n=4,498)
No would not continue to apply	18.9% +/- 3.9% (n=2,843)
Unsure	51.3% +/- 4.5% (n=4,352)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services.* Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Table 13. Public Library Provision of Digital Reference Services.	
Provision of Digital Reference Services	**Percentage of Digital Reference Services**
Currently provide digital reference services	31.7% +/- 4.6% (n=4,771)
Do not provide digital reference services	59.9% +/- 4.9% (n=9,028)
Plan to provide digital reference services within the year	8.4% +/- 2.8% (n=1,260)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Digital Reference Services

A new question added to this iteration of the *Public Libraries and the Internet* survey was with regard to the implementation of digital reference services. As Table 13 shows, 31.7% of public libraries currently provide digital reference services and 8.4% of libraries have plans to provide digital reference services within the year.

Training Services

With the increases of Internet provision in public library outlets, public libraries are providing formal Internet training services for patrons. These training services were the subject of a few of the new questions of the 2002 *Public Libraries and the Internet* survey. Survey responses showed that 42% of public libraries offer formal Internet training services for patrons (see Table 14). Of the libraries that provide training services, 22.9% have their own training facilities and 14% have shared facilities. Another 4.4% will have a training facility within the next year.

Table 14. Public Library Formal Patron Internet Training Services and Training Facilities.	
Public Training Services	**Percentage of Public Training Services**
Library provides formal Internet training services to its patrons	42.0% +/- 4.9% (n=6,332)
Library does not provide formal Internet training services to its patrons	58.0% +/- 4.9% (n=8,728)
Technology Instructional Facility	**Percentage of Instructional Facility**
Library has a separate instructional facility in a library facility/branch	22.9% +/- 4.2% (n=3,446)
Library has access to a shared instructional facility (e.g., shared with a school or local agency)	14.0% +/- 3.4% (n=2,108)
Library does not have access to a separate instructional facility	63.1% +/- 4.8% (n=9,505)
Library will have access to an instructional facility within the next year	4.4% +/- 2.0% (n=667)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Almost half (49.1%) of the public libraries surveyed target the senior adult public for training services, 31.4% target non-senior adults, and 32.6% of the libraries provide Internet training services specifically for children and youth groups (see Table 15). Another 18% of libraries target local businesses and 8% target local government audiences for training services.

Table 15. Public Library Formal Patron Internet Training Services Target Audiences.

Target Audiences for Public Training Services	Percentage of Public Target Audiences
Adult (non-senior) public	31.4% +/- 4.6% (n=4,731)
Adult (senior) public	49.1% +/- 4.9% (n=7,392)
Children/youth public	32.6% +/-4.7% (n=4,906)
Local businesses	18.0% +/- 3.8% (n=2,714)
Local government	8.0% +/- 2.7% (n=1,212)
Other targeted populations	10.2% +/- 3.0% (n=1,538)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

Finally, the data show that 43.6% of libraries offer formal technology training for staff members (see Table 16). Trainings for staff include such technology instruction topics as:

- General computer skills (28.1%);
- General computer software use (44.9%);
- General technology troubleshooting (37.2%);
- General Internet use (44.3%); and
- Online Web searching (47.5%).

Focused staff training was offered in some library systems for locating government information on the web (31.5%) and using online databases (41.6%).

Table 16. Public Library Formal Staff Technology Training Services and Training Topics.

Staff Training Services	Percentage of Staff Training Services
Library offers formal technology training services to its staff	43.6% +/- 4.9% (n=6,559)
Library does not offer formal technology training services to its staff	56.4% +/- 4.9% (n=8,501)
Technology Instruction Topics	**Percentage of Instruction Topics**
General computer skills (e.g., mouse use, printing)	28.1% +/- 4.5% (n=4,228)
General computer software use (e.g., word processing, spreadsheets, databases, presentation)	44.9% +/- 4.9% (n=6,754)
General technology troubleshooting (e.g., dealing with frozen computers, jammed printers, etc.)	37.2% +/- 4.8% (n=5,595)
General Internet use (e.g., e-mail, web browsing)	44.3% +/- 4.9% (n=6,678)
Online/web searching (e.g., using Google, AltaVista, other to locate information and sources)	47.5% +/- 5.0% (n=7,147)
Locating government information on the web	31.5% +/- 4.6% (n=4,738)
Using online databases (e.g., using commercial databases to search and find content)	41.6% +/- 4.9% (n=6,270)

Source: Bertot, J.C., and McClure, C.R. (2002). *Public Libraries and the Internet 2002: Internet Connectivity and Networked Services*. Tallahassee, FL: Information Use Management and Policy Institute, Florida State University. Available at: <http://www.ii.fsu.edu>.

SUMMARY AND RECOMMENDATIONS

The Internet has become an integral part of public libraries in the United States. Services in libraries are changing based on a foundation of connectivity. Notable data from this most recent survey of public library outlets and systems show that:

- Within the past eight years, public library Internet connectivity has increased substantially, from 20.9% of public library *systems* connected to the Internet in 1994 to 98.7% of public library *outlets* connected to the Internet in 2002.
- About 95% of outlets provide public Internet access.
- The filtering of content is substantial in public libraries, with 41.9% blocking objectionable content on all or some outlet-based workstations.
- Public library funding for technology is shifting toward more state and local non-government funds.
- Almost one third (31.7%) of public libraries offer digital reference services, and 8.4% plan on implementing such services within the next year.
- 42% of public libraries offer formal Internet training and 36.9% of these have a separate facility, whether private or shared, for this training.

The data indicate that libraries are increasing Internet technologies and services to meet the perceived demand for increased online services and resources. Increases in the provision of subscription databases both within libraries (up 9.5% since 2000) as well as by remote access to online subscription databases (up 8.2% since 2000) further demonstrate the increasing importance of online services provided by public libraries.

APPENDIX A – ONLINE SURVEY FORM

(Please note that the survey form appeared differently in its online format)

Survey Screen 1 – Survey Login and Introduction

2002 Public Library Internet Survey

Since 1994, Drs. John Carlo Bertot and Charles R. McClure have conducted a bi-annual survey of public library Internet connectivity with support over the years from the American Library Association (ALA), Institute of Museum and Library Services (IMLS), and the National Commission on Libraries and Information Science (NCLIS). This survey has pioneered a number of questions that provide extremely important data regarding public library Internet connectivity, use, and involvement that enable practitioners, policy makers, and researchers understand the nature, extent, and changes of public library Internet connectivity. We encourage you to review prior studies and see the value your response provides in developing state and national information policy (http://www.nclis.gov/statsurv/statsurv.html).

Your library has been selected to participate in the study this year. The survey asks questions regarding your library's Internet connectivity and Internet-based services. In particular, the survey asks about whether your library is connected to the Internet and provides public access, the number of graphical workstations for public access, speed of connectivity, whether your library filters Internet content and services, availability of online databases, and public and staff training services.

The survey does not take more than 5 minutes to complete, however, your participation will provide important data for years to come. THANK YOU for your willingness to participate! Please enter your library's survey ID (found on your survey alert letter) to begin the survey process. If you cannot remember and/or locate your survey ID, please follow the link below to locate your library by zip code.

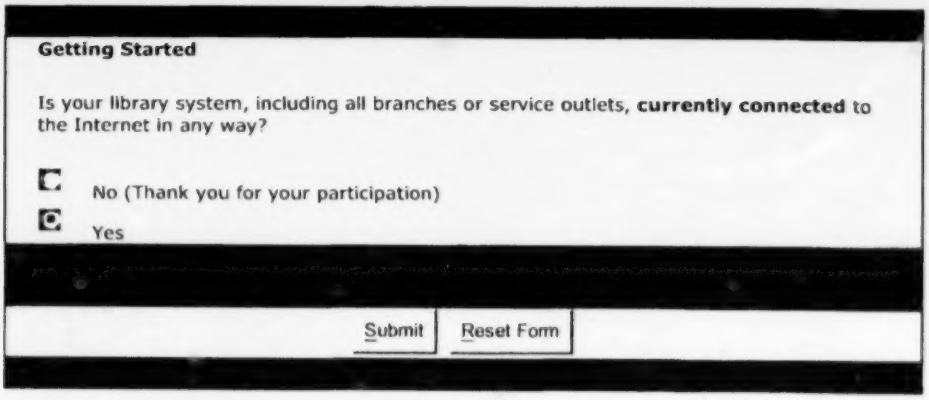
Enter your Access Code in the field below to begin the survey. You will be able to come back and change your answers at any time, or print your survey for your records.

Access Code:

Login

If you do not have your access code
follow this link.

Survey Screen 2 – Internet Connectivity Screening Question


Getting Started
Is your library system, including all branches or service outlets, currently connected to the Internet in any way?
No (Thank you for your participation)
Yes
Submit
Reset Form

Survey Screen 3 – Branch/Outlet Questions

Welcome to the Survey.

This portion of the survey contains questions regarding **specific branches or outlets** in your Library System. The branches that have been chosen for this survey are listed below. When you click 'Submit and Continue' at the bottom of this form, you will **automatically** be taken to the form for the next branch or outlet. Once you have completed the questions pertaining to these outlets, you will be taken to a short form containing questions relating to your entire Library System.

Branch Name	Survey Status
Alviso Library	Incomplete
Biblioteca Latino Americano	Incomplete
Rosegarden Library	Incomplete

You are answering questions regarding the following library branch or service outlet:
Alviso Library

Question 1. (required)

Is this library branch/service outlet **currently connected** to the Internet in any way?

- ☐ No (If you answer 'no', please click here.)
- ☐ Yes, staff access only (If you answer 'yes, staff only' please click here.)
- ☐ Yes, public and staff access

Question 2.

Please indicate the **number of GRAPHICAL PUBLIC ACCESS Internet workstations** provided by this library branch/service outlet (include in the count multi-purpose workstations that allow access to the Internet. Exclude workstations that only access the library's web-based OPACs):

(Please type in number): [ ]

Question 3.

Please indicate the **maximum speed** of this **library branch's/service outlet's PUBLIC ACCESS Internet service connection**:

[select one]

Question 4.

Please complete the following questions about this library branch's/service outlet's **PUBLIC ACCESS Internet services**:

	On all workstations	On some workstations	On no workstations	Service offered remotely to off-site users
This library outlet offers public access to subscription databases (e.g., EbscoHost, InfoTrac, SIRS, etc. Answer "yes" if the library does not subscribe directly to these subscription databases, but rather receives them through consortia, state library, or other means)	☐	☐	☐	☐
This library outlet uses technology measures (e.g., filtering software) to block users from accessing various Internet SERVICES (e.g., e-mail, chat)	☐	☐	☐	
This library outlet uses technology measures (e.g., filtering software) to block users from accessing various Internet CONTENT (e.g., images, text)	☐	☐	☐	

Submit and Continue | Reset Form

If you have any questions regarding the survey, please contact John Bertot via e-mail at jcbertot@lis.fsu.edu or by phone at (850) 644-8118."

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Survey Screen 5 – System Level Questions

System Questions

You are now answering questions regarding your entire **LIBRARY SYSTEM**.

Please indicate your library's **sources of funding for Internet-related technology and infrastructure** (e.g., space, wiring, telecommunications services, workstations, servers, furniture, etc.) for the library's last fiscal year. (Select all that apply)

- ☐ Operating funds from local government/tax districts
- ☐ Operating funds from state library
- ☐ State grants
- ☐ Federal government funds (LSTA, TIAPP)
- ☐ Education Rate (E-rate) discount
- ☐ Library foundation funds
- ☐ Gates Library Program
- ☐ Gifts, contributions, donations
- ☐ Local fund raisers
- ☐ Other income sources

If your library applied for and received E-rate funding during the library's last fiscal year, please answer the following questions:

a.) Will your library **continue to apply for E-rate funding** should the Children's Internet Protection Act (CIPA) that requires the filtering of public access Internet content in exchange for continued E-rate funding survive its legal challenges?

[select one]

b.) Can you please **estimate the percentage of cost** for your library's Internet connectivity/telecommunications services that E-rate funding covered during the last fiscal year?

____ %

Question 6.

Does your library currently offer digital reference services (e.g., receive/answer reference questions via e-mail or web-based technologies)?

[select one]

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Survey Screen 5 – System Level Questions (cont'd)

Question 7.

Does your library offer **formal Internet training services for its patrons**?

[select one]

If yes, please answer the following questions:

a.) Does your library have access to a separate instructional room (e.g., computer lab) for its training services?

[select one]

b.) Please identify the **target audiences** of these training services:

- ☐ Adult (non-senior) public
- ☐ Adult (senior) public
- ☐ Children/youth public
- ☐ Local business
- ☐ Local government
- ☐ Other targeted populations

c.) If your library uses **technology measures to filter Internet content**, does your library inform patrons of this during its training sessions?

[select one]

Survey Screen 5 – System Level Questions (cont'd)

Question 8.

Does your library offer **formal Internet training services for its staff**?

[s one]

If yes, please answer the following questions:

a.) Please identify the most common topics covered in these training session:

- General computer skills (e.g., mouse use, printing)
- General computer software use (e.g., wordprocessing, spreadsheets, databases, presentation)
- General technology troubleshooting (e.g., dealing with frozen computers, jammed printers, etc.)
- General Internet use (e.g., e-mail, web browsing)
- Online/web searching (e.g., using Google, AtlaVista, other to locate information and sources)
- Locating government information on the web
- Using online databases (e.g., using commercial databases to search and find content)
- Technology planning and management (e.g., developing and implementing technology infrastructure, managing equipment)

Submit Survey | Reset Form

If you have any questions regarding the survey, please contact John Bertot via e-mail at jcbertot@lis.fsu.edu or by phone at (850) 644-8118."

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Survey Screen 6 – Hyperlinked Glossary of Terms

GLOSSARY OF SURVEY ABBREVIATIONS/KEY TERMS

Outlet/Branch
A library facility. In the case of some public libraries, there is only one facility or outlet. Other public libraries have several outlets or facilities sometimes referred to as branches.
[top]

Graphical Workstation
A workstation and/or computer that is capable of displaying graphical images, pictorial representations, or other multi-media formats.
[top]

Public Access Internet Workstations
Those library outlet graphical workstations that provide public access to the Internet, including those that provide access to a limited set of Internet-based services such as online databases.
[top]

KBPS
Kilobits per second.
[top]

MBPS
Megabits per second.
[top]

Dial-up Internet Connection
Internet connection using a modem and a phone line.
[top]

Direct Internet Connection
Internet connection using a dedicated connection such as a leased line (e.g., T1, 56kbps, ISDN, DSL), cable, or satellite.
[top]

Service Offered Remotely to Off-Site Users
Internet-based services such as online databases (e.g., EbscoHost) the library offers that users can access via the Internet from home, office, school, or other non-library locations.
[top]

Formal Internet Training Services
Instruction offered in the use of information technology or resources obtainable using information technology in structured sessions.
[top]

Technology measures to filter Internet content
Technology measures include filtering software that blocks and/or filters Internet content and/or software that prevents Internet-based activities such as chat.
[top]

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Signature: Charles R. McClure	Printed Name/Position/Title: Charles R. McClure Frances Eppes Professor & Director
Organization/Address: Charles R. McClure School of Information stuides/Florida State University. Tallahassee,FL 32306-2100	Telephone: 850-644-8109 FAX: 850-644-9763 E-mail Address: cmcclure@lis.fsu.edu Date: 2002

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